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WEEKLY UPDATE

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The HIO Weekly Update provides information regarding global medical and veterinary issues of interest to the United States (US) Army. The weekly update does not attempt to analyze the information regarding potential strategic or tactical impact to the US Army and as such, should not be regarded as a medical intelligence product. Medical intelligence products are available at <http://mic.afmic.detrick.army.mil/>. The information in the HIO Weekly Update should provide an increased awareness of current and emerging health-related issues.

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HOT ISSUES

Anthrax Decontamination - [DOE](#)

On 16 January, the [DOE's](#) Idaho National Engineering and Environmental Laboratory announced they were teaming with a small business located in Aberdeen, Idaho, to experiment with destroying anthrax on mail using ozone. The small business currently uses the patented process to destroy harmful bacteria on harvested potatoes. The report is at <http://newsdesk.inel.gov/contextnews.cfm?ID=275>.

Anthrax Edema Toxin – Structure Identified

On 24 January, Nature reported that the X-ray structure of edema factor, one of two soluble anthrax exotoxins, has been identified. Edema factor produces edema or swelling once activated by calmodulin inside the cell cytoplasm. This study indicates that the catalytic site of edema factor is sufficiently different from other adenylyl cyclases to offer a starting point for therapeutic developments. The [VOA](#) reports that pharmaceutical companies are reviewing their library of compounds to determine if any already identified can target this site or if new drugs need to be developed. The Nature abstract is at <http://www.nature.com/nature/links/020124/020124-5.html>.

Anthrax Prophylaxis – [CDC](#)

On 25 January, the [CDC](#) reported that at least 10,000 persons potentially exposed to anthrax in Connecticut, Florida, New Jersey, New York City, and the D.C. metro area were recommended to take at least 60 days of post-exposure antibiotic prophylaxis. [CDC](#) has contracted RTI International to begin conducting telephone interviews in late January of all persons who received post-exposure antibiotic prophylaxis. The survey process is expected to take eight weeks.

Biowarfare Agent Detection – Cepheid

On 7 January, Cepheid announced that it had delivered to [USAMRIID](#) field-ready [PCR](#) test kits for rapid detection of four biowarfare agents: *Bacillus anthracis* (anthrax), *Yersinia pestis* (plague), *Francisella tularensis* (tularemia), and *Clostridium botulinum*

(botulism). The test kits identify gene sequences validated by [USAMRIID](#) using “freeze-dry” processing to provide on site detection in as little as 20 minutes. The reagent formulations and processing produce tests which remain stable for many months at room temperature. The press release is at <http://www.cepheid.com/pages/press/020107.html>.

Chloramphenicol Use Discouraged in Food Production – [UN](#)

On 24 January, the [UN](#) Food and Agriculture Organization (FAO) urged countries to take steps to stop the use of chloramphenicol in food animal production. The FAO advocates that chloramphenicol is genotoxic, which means it could cause genetic damage and possibly lead to cancer. The FAO reported that chloramphenicol is still being used in some countries in animal production, including aquaculture. In the US, the [FDA](#) prohibits extra-label use of chloramphenicol in food animals. The report is at http://www.fao.org/WAICENT/OIS/PRESS_NE/2002/2280-en.html.

Country Profiles – [WHO](#) Europe

On 13 January, the [WHO](#) regional office for Europe launched a new website that provides basic statistics and health care information by country. A link for health topics by category is also at the bottom of the web page. The website is at <http://www.who.dk/eprise/main/WHO/CountryInformation/TopPage>.

Foodborne Illness Fact Sheet Updates – [WHO](#)

The [WHO](#) recently update fact sheets for food safety and foodborne illness at <http://www.who.int/inf-fs/en/fact237.html> and emerging foodborne diseases at <http://www.who.int/inf-fs/en/fact124.html>.

Gulf War Illness Panel – Veteran’s Affairs

On 23 January, Reuters reported that a 12-member advisory committee was appointed under the Department of Veteran’s Affairs to review existing research and make recommendations to the Veteran’s Affairs Secretary about needed research areas that may lead to improved diagnosis and treatment of Gulf War veterans. The report is at http://www.reuters.com/news_article.ihtml?type=sciencenews&StoryID=538892.

Gulf War Syndrome – [GAO](#) Update

On 24 January, the [GAO](#) provided a periodic update on the Gulf War Allies veterans’ health status. The conclusion remains that French veterans of the Gulf War have not reported as many illnesses since the conflict as their counterparts in the UK and US. The report highlights some of the differences previously reported and associated with French forces: (1) were primarily located in the west; (2) did not make use of vaccines to protect against biological warfare agents; (3) did not officially use pyridostigmine bromide tablets (some units collocated with US forces did use the tablets); (4) did not

use organophosphate pesticides; (5) relied on bottled water; (6) had less bulky protective gear; and (7) had greater access to collective protection, such as specially ventilated truck cabs and shelters. The report is at <http://www.gao.gov/new.items/d02359t.pdf>.

Homeland Security – Updates

On 25 January, the [AFPS](#) reported that President Bush's upcoming State of the Union address would cite the following three top goals: national security, homeland defense, and revitalization of the nation's economy. The President will also present the fiscal 2003 budget request to Congress. The request will include \$48 billion in new defense spending and \$38 billion for homeland security. The funding for homeland security would double the 2002 appropriation. Proposed funding would include appropriations for the following:

- New equipment to improve the safety of the mail and to protect postal workers
- Modernization of health laboratories throughout the country to improve their capacity to detect and treat outbreaks of disease.
- About \$3.5 billion, a 1,000% increase, would go to first responders: \$2 billion to buy [PPE](#), chemical and biological detection systems, interoperable communications gear and other equipment; \$1.1 billion to train first responders to respond and operate in chemical and biological environments; and \$105 million to support state and local governments in developing plans to prepare for and respond to a terrorist attack.
- [FEMA](#) will be tasked to coordinate with 36,000 jurisdictions to ensure that communications equipment and rescue equipment are compatible not only within a state but also *nationally*.

Influenza Surveillance – [DoD](#)

The [DoD](#) Worldwide Influenza Surveillance Program is a laboratory-based influenza surveillance program managed by the Air Force. As of 24 January, 125 (9%) of 1,394 submitted specimens have been identified as positive for influenza since the start of the influenza season. Of the isolates, 36 (29%) have been subtyped, and all were influenza A (H3N2), with the exception of one influenza A (H1N1) from Osan Air Base, Korea. The majority (53%) of the isolates from week prior to the report were from the Mid-Atlantic, South Atlantic, and South Central regions of the US. Seven isolates were identified from RAF Lakenheath. Further information, including data from the [CDC](#) and international sites, are available at: <https://pestilence.brooks.af.mil/Influenza/>

Note: Some users may experience difficulty accessing this link directly from this document; if this occurs, copy and paste the hyperlink in your browser address bar.

Influenza Surveillance – US

The current report for the week ending 12 January (week 2) indicates that during this week overall national visits to physicians for influenza-like illness were 1.6%, which is

a commitment to attaining this goal. The report is at <http://www.gao.gov/new.items/d02377t.pdf>.

Smallpox Stockpiles – [WHO](#)

On 17 January, the Associated Press reported that the [WHO](#) governing body proposed a reversal of a long-standing order for the destruction of all smallpox virus stocks and recommended they be retained for research into new vaccines or treatment. In 1996 the [WHO](#) recommended destruction of the virus by mid-1999, but extended this to not later than 2002 after US and Russian resistance. The World Health Assembly will vote on the proposal in May. The report is at http://wire.ap.org/APnews/center_story.html?FRONTID=SCIENCE&STORYID=API_S7H3H3N00.

Typhoid Fever Containment – Germany

On 24 January, the Eurosurveillance Weekly provided a case report on the containment of a case of typhoid fever in a German student who had recently arrived from India. The preventive countermeasures used for the patient and close contacts averted any further cases and included restricted use of community venues, such as public baths, saunas, and event halls; required disinfection of toilets after use; and strict hand washing procedures. The college allocated a toilet, equipped with disinfectant and signage, so that the students were able to continue their studies. The patient's third stool specimen was positive for typhoid bacteria requiring a further four weeks of antibiotic treatment. These preventive countermeasures may be useful for similar dormitory conditions. The report is at <http://www.eurosurv.org/2002/020124.htm>.

USCENTCOM

Health Care Study – Central Asia

On 21 January, the [WHO](#) regional office in Europe announced that the European Observatory on Health Care Systems recently published *Health Care in Central Asia*. The central theme of the report is that health care systems of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan remained deeply rooted in the Soviet health care model. Two common concerns for these countries are the deteriorating health status of their populations and the poor state of primary health care. The report is at http://www.who.dk/eprise/main/WHO/Progs/Obs/Studies/20011130_1.

Meningococcal Meningitis – Somalia

On 26 January, the [WHO](#) reported that the National Epidemic Task force, which consists of 23 teams, had vaccinated 67,681 people in the past two days to quell the outbreak of meningococcal meningitis in Hargeisa, Somalia. The outbreak has been ongoing since early October. The report is at <http://www.who.int/disease-outbreak-news/n2002/january/28january2002.html>.

USEUCOM

Cholera Outbreaks – Democratic Republic of the Congo

On 23 January, the ReliefWeb posted a report from Oxfam of 300 suspected cases of cholera in a western Rwandan town to which refugees from the Democratic Republic of the Congo had fled after the volcano eruption on 17 January. No further reports relating to cholera diagnoses have been posted. The latest report refers only to the threat of cholera. The report of cholera is at

<http://www.reliefweb.int/w/rwb.nsf/480fa8736b88bbc3c12564f6004c8ad5/92e84c6b5987a6c2c1256b4a0061f7b7?OpenDocument>.

Diphtheria – England

On 24 January, the Eurosurveillance Weekly reported that the [PHLS](#) in London indicated that preliminary findings of genotyping (ribotyping) has indicated the identification of an uncommon ribotype of *Corynebacterium diphtheriae* that has not been seen in the European region for more than a decade. The isolate was from a throat swab taken on 14 January from an 11-year-old boy in Salford, northwest England. The child developed a sore throat six days after returning with his family from Jerusalem, Israel. The report is at <http://www.eurosurv.org/2002/020124.htm>.

Ebola / Viral Hemorrhagic Fever – Gabon and Republic of Congo

On 20 January, the [WHO](#) reported that after two weeks the international team is still unable to enter Mekambo in Gabon but is operating in Makokou and Libreville in Gabon and in the Republic of the Congo. The international medical teams refuse to return until their safety can be guaranteed. Angry villagers, who were upset after being told not to conduct ritual washings of the corpses, threatened the teams. The cases for this reporting period and totals are listed in the chart below. An additional 22 cases in Gabon remain under investigation. The report is at <http://www.who.int/disease-outbreak-news/n2002/january/24january2002.html>.

Country	This report (9-22 January)		Totals (11 December – 22 January)		
	New Confirmed Cases This Report Period	Deaths This Report Period	Confirmed Cases	Deaths	Case Fatality Rate
Gabon	5	5	26	23	88%
Republic of the Congo	3	4*	16	11	69%
Totals	8	9*	42	34	81%

*Excess death likely due to death of a case that was confirmed during the previous report period

FMD Free – France, Ireland, Netherlands, South Korea, and UK

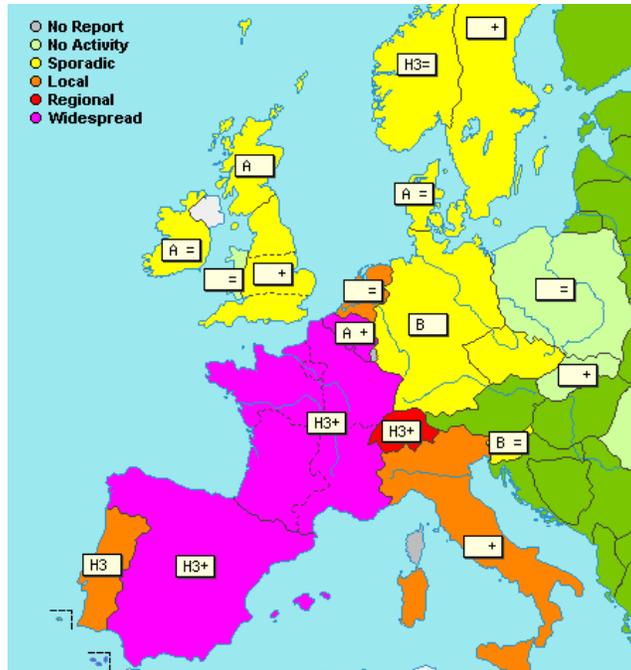
On 21 January, the [OIE](#) declared that France, Ireland, the Netherlands, South Korea, and the UK regained their previously recognized status of [FMD](#)-free without vaccination. The status of all countries was reviewed in the report, which is at http://www.oie.int/eng/info/en_fmd.htm.

HIV Prophylaxis – South Africa

On 22 January, the [VOA](#) reported that the South African province of KwaZulu-Natal announced plans to distribute nevirapine to [HIV](#)-infected pregnant women in an attempt to prevent disease in their newborns. KwaZulu-Natal reportedly has the highest [HIV](#) rates in the country. KwaZulu-Natal is the second province to distribute the drug since Western Cape began distribution in 2000. The decision is in defiance of a national policy to limit distribution of the drug except to select pilot programs due to questions of drug safety. Each year more than 70,000 babies are infected with HIV in South Africa.

Influenza Surveillance – Europe

For week 14 – 20 January, the [EISS](#) reported widespread influenza activity with rates above the baseline thresholds at a medium intensity in Belgium, France, Spain, and Switzerland. Other central and northern European countries remained at low levels with no activity, sporadic, or local activity. Isolations indicate a co-circulation of influenza A (H3N2), influenza A (H1N1), and B viruses, with influenza A (H3N2) dominant in most countries. Influenza A (H3N2) viruses antigenically characterized in France and Switzerland were related to influenza A/Panama/2007/99 (H3N2), which is closely related to the 2001/2002-vaccine strain A/Moscow/10/99 (H3N2). The report is at http://www.eiss.org/cgi-files/bulletin_v2.cgi?display=1&code=52&bulletin=52.



Picture Courtesy of EISS at http://www.eiss.org/cgi-files/bulletin_v2.cgi?display=1&code=52&bulletin=52.

Tularemia Outbreak – Kosovo

On 25 January, the [WHO](#) reported that as of 24 January, 496 suspected cases of tularemia have occurred since the outbreak began on 1 November. This is an increase of 214 cases since the last report on 17 January. The Pristina Institute of Public Health (IPH) has laboratory confirmation for 109 of these cases. There have been no reported deaths to date. The [WHO](#) and the Italian and German component of [K-FOR](#) are assisting the IPH by providing reagents for diagnostic tests. Tularemia is endemic in Eastern Europe and has a variety of clinical manifestations, which include high fever, swollen lymph nodes, and difficulty swallowing lasting about two weeks. The report is at <http://www.who.int/disease-outbreak-news/n2002/january/25january2002.html>.

USJFCOM

Albuterol in Horses – [FDA](#) Approval

The [FDA](#) Veterinarian reported that the first metered-dose inhaler approved for use in horses recently received approval. Albuterol is administered to horses intranasally via a metered-dose inhaler for the immediate relief of bronchospasm and bronchoconstriction associated with reversible airway obstruction, which is also known as chronic obstructive pulmonary disease (COPD) in horses. The aerosol provides an alternative to the oral syrup clenbuterol. The marketer is Boehringer Ingelheim VetMedica.

Applied Epidemiology – [FSIS](#)

On 29-30 January the [FSIS](#) will hold public meetings to discuss the use of epidemiological data, scientific principles and techniques, and the use of other public health tools in investigating foodborne illness outbreaks and slaughterhouse application. The news release is at <http://www.fsis.usda.gov/OA/news/2002/epimeeting.htm>.

Bioterrorism Response – [DHHS](#)

On 25 January, the [DHHS](#) announced the FY 2002 Bioterror Supplemental Appropriations included the following key highlights: (1) fortifying the federal/state/local public health network (\$940 million); (2) helping hospitals prepare to cope with bioterror incidents (\$135 million); (3) support for community emergency preparedness (\$51 million); (4) expanding the National Pharmaceutical Stockpile (\$645 million); (5) purchasing new smallpox vaccine (\$512 million); (6) [NIH](#)-supported research (\$248 million); (7) [FDA](#) food safety and drug/vaccine preparedness (\$145 million); and (8) enhanced [CDC](#) capacity, especially lab capacity (\$116 million). Other key goals included having at least one epidemiologist in each metro area with a population greater than 500,000 and developing an education and training plan that will reach health professionals and the public with information relating to bioterrorism.

Carprofen in Dogs – [FDA](#) Supplemental Approval

The [FDA](#) Veterinarian reported that the [FDA](#) recently approved modification of the labeling on carprofen in dogs to a once daily oral dosage. Carprofen is used for the relief of pain and inflammation associated with osteoarthritis. The marketer is Pfizer.

Diphtheria – Russia

On 24 January, the Eurosurveillance Weekly reported that it had unofficial reports of increasing cases of diphtheria in areas of Russia bordering Finland, especially St Petersburg. This comes in light of a fatal case in an unvaccinated, three-month old, child in southeastern Finland in November 2001. Many of the contacts identified in this case had recently visited Russia. The DNA typing results indicate the bacterial strain is similar to *C. diphtheriae* var *mitis* strains recently circulating in Russia. The report urged adults to ensure that a full series of three doses of diphtheria vaccine and booster doses every 10 years is current when traveling to Russia or the Baltic states. The report is at <http://www.eurosurv.org/2002/020124.htm>.

[HACCP](#)-based Meat Inspection Program – [USDA](#)

On 15 January, the [USDA](#) announced its proposal to strengthen the [HACCP](#)-based Inspection Models Project (HIMP). The [USDA](#) will propose regulations this year for plants that slaughter young chickens. Proposals for plants that slaughter young turkeys and hogs will follow. This comes in light of a [GAO](#) report on 17 December, which stated that the pilot project data do not conclusively demonstrate that HIMP inspections are at

least equal to traditional inspections. The [USDA](http://www.usda.gov/news/releases/2002/01/0011.htm) news release is at <http://www.usda.gov/news/releases/2002/01/0011.htm> and the [GAO](http://www.gao.gov/new.items/d0259.pdf) report is at <http://www.gao.gov/new.items/d0259.pdf>.

PCB Lawsuits – Alabama

On 7 January, 3,500 plaintiffs filed a lawsuit against Monsanto and its chemical division Solutia, Inc. for health problems related to four decades of PCB environmental pollution in Anniston, Alabama. According to a press release by Solutia, Inc., 700 litigants claim past or current personal injury and 2,800 claim damages on fear of potential future injury. The lawsuit is ongoing, but on 28 January the Gadsden Times reported that there are new concerns regarding mercury release from the existing plant and the Army's plans to incinerate "toxic gases" at its depot in Anniston. The Gadsden Times story is at <http://www.gadsdentimes.com/news/stories/3815newsstorypage.html> and the Solutia, Inc., press release is at http://investor.solutia.com/ireye/ir_site.zhtml?ticker=soi&script=410&layout=-6&item_id=242009/

Winter Olympic Task Force – [JTF-CS](#)

On 25 January, the [AFPS](#) reported that the [JTF-CS](#) met with the Salt Lake Olympic Committee regarding support for the Winter Olympics. The Fort Monroe-based unit leads military support in the case of a [WMD](#) incident in the continental US - acting as the command and control center for supporting military forces. The unit has more than a dozen certified teams trained to contain nuclear, biological, chemical or radiological attacks and would assist local and federal authorities in the event of an attack. The report is at http://www.defenselink.mil/news/Jan2002/n01252002_200201252.html.

World Trade Center "Cough" – Ground Zero

On 24 January, the [VOA](#) reported that some individuals have filed claims against the city for what is being termed the world trade center (WTC) "cough." The amount of debris left after the collapse is estimated at one million tons, which reportedly has traces of asbestos, benzene, dioxins, and PCBs. The report states that blood tests in four police officers at the site had elevated levels of mercury, and an independent contractor found asbestos 555 times above the suggested acceptable level in a large apartment building near ground zero. The EPA has not declared the site a Super Fund site and continues to affirm that the area poses no long-term health risks. The EPA does stress the need for WTC workers to wear personal protective equipment. An estimated 40,000 people live near ground zero.

Research

Genomics – Japan

On 25 January, the [VOA](#) reported that Japanese researchers have successfully bred pigs that have had spinach genes inserted into the fertilized egg. The scientists report that their unprecedented combination of animal and vegetable may create meat with lower fat content. The gene changes about 1/5 of the pigs' saturated fatty acids into "healthier" linoleic acids. The scientists say that three to four years of safety tests are needed before the genetically altered meat could be available for consumers. Until then, scientists will reportedly continue to create pigs that have additional genes from vegetables.

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ACRONYMNS

AFPS – American Forces Press Service
APHIS – Animal and Plant Health Inspection Service
BSE – Bovine Spongiform Encephalopathy
CAMR – Center for Applied Microbiology and Research (England)
CDC – Centers for Disease Control and Prevention
CDR – Communicable Disease Report (England)
CIA – Central Intelligence Agency
CONUS – Continental United States
DARPA – Defense Advanced Research Projects Agency, the central research and development organization for the Department of Defense
DHHS – Department of Health and Human Services
DoD – Department of Defense
DOE – Department of Energy
DOS – Department of State
DOT – Department of Transportation
ECG - Electrocardiogram
EISS – European Influenza Surveillance Scheme
EPA – Environmental Protection Agency
ESSENCE – Electronic Surveillance System for the Early Notification of Community-Based Epidemics
FBI – Federal Bureau of Investigation
FDA – Food and Drug Administration
FEMA – Federal Emergency Management Agency
FMD – Foot and Mouth Disease
FSIS – Food Safety Inspection Service
GAO – US General Accounting Office
GEIS – Global Emerging Infections System
HACCP – Hazard Analysis Critical Control Points
HIV – Human Immunodeficiency Virus
ICBM – Intercontinental Ballistic Missile
IDP – Internally Displaced Persons
ILI – Influenza-Like Illness
ICRC – International Committee of the Red Cross
IRCS – International Red Cross Society
JCVI – Joint Committee on Vaccination and Immunisation [sic] (England)
JTF-CS – Joint Task Force – Civil Support http://www.jfcom.mil/About/com_jtfc.htm
K-FOR – Kosovo Forces, a [NATO](#)-led international peace enforcement force that entered Kosovo on 12 June 99 under a [UN](#) mandate. <http://www.kforonline.com/>
NAS – National Academy of Sciences
NATO – North Atlantic Treaty Organization
NCI – National Cancer Institute
NFCI – National Focus for Chemical Incidents (England)
NIH – National Institutes of Health
NPIC – National Pesticide Information Center

NRC – Nuclear Regulatory Commission
NRPB – National Radiological Protection Board (England)
OIE – World Organisation [sic] for Animal Health
PCR – Polymerase Chain Reaction
PHLS – Public Health Laboratory Service
PHS – Public Health Service
PPE – Personal Protective Equipment
RSV – Respiratory Syncytial Virus
TB – Tuberculosis
UN – United Nations
UNHCR – United Nations High Commissioner for Refugees
USAMRIID – United States Army Medical Research Institute for Infectious Diseases
USDA – United States Department of Agriculture
USPSTF – United States Preventive Services Task Force
VOA – Voice of America, an international multimedia broadcasting service funded by the US Government
WHO – World Health Organization
WMD – Weapons of Mass Destruction